

Office of Surface Mining Reclamation and Enforcement

Annual Evaluation Report

for the

Regulatory and Abandoned Mine Land Reclamation Programs

Administered by the State

of

UTAH

for

Evaluation Year 1995

(July 1, 1994 through December 31, 1995)

August 1996

TABLE OF CONTENTS

- I. Introduction
- II. List of Acronyms
- III. Executive Summary
- IV. Overview of the Utah Coal Mining Industry
- V. Success in Achieving the Purposes of SMCRA
- VI. Innovative State Actions
- VII. Status of Issues from Previous Annual Evaluation Reports
- VIII. Actions Affecting Program Implementation
- IX. Summary Findings
 - A. Regulatory Program
 - B. AMLR Program

Appendix A: Tabular Summaries of Data Pertaining to Mining, Reclamation and Program Administration

- 1. Coal Production
- 2. Inspectable Units
- 3. State Inspection Activity
- 4. Trends in State Inspections and Inspectable Units
- 5. State and OSM Enforcement Activity
- 6. OSM Inspections of Sites Where the State is the Primary Regulatory Authority
- 7. OSM Inspections of Sites Where the State is Not the Primary Regulatory Authority
- 8. Compliance Findings - OSM Inspections
- 9. Citizen Complaints

10. Permit Applications Received by the State
11. State Permitting Actions
12. Bonds Released by State
13. State Bond Forfeiture Activity
14. Status of State's Bond Pool
15. Lands Unsuitable Petitions
16. Utah Staffing
17. Funds Granted to Utah by OSM by Evaluation Year
18. Status of AMLR Funds Awarded to Utah
19. Abandoned Mine Land Reclamation Needs and Accomplishments Since Program Approval

I. Introduction

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining Reclamation and Enforcement (OSM) in the Department of the Interior. SMCRA provides that, if certain conditions are met, a State may assume primary authority for the regulation of surface coal mining and reclamation operations and the reclamation of abandoned mine lands within its borders. Once a State has obtained such approval, OSM has the responsibility to make the investigations, evaluations, and inspections necessary to determine whether the State is implementing and maintaining its regulatory and abandoned mine land reclamation (AMLR) programs in accordance with SMCRA and the approved program provisions.

On August 9, 1994, the Albuquerque Field Office (AFO) conducted a public meeting in Salt Lake City, Utah, to solicit comments regarding the oversight process, recommendation for additional review topics, and suggestions for improvement of future reports.

Effective July 1, 1995, OSM transferred the responsibility for conducting oversight of the Utah regulatory program from AFO to the Denver Field Division (DFD). DFD drafted this report, which covers the 18-month period from July 1, 1994, through December 31, 1995. It includes summaries of workplan reviews conducted by AFO during the time period July 1, 1994, through June 30, 1995, and tables of data compiled by DFD for the time period January 1, 1995, through December 31, 1995. Detailed background information and comprehensive reports for each program element and subelement evaluated in depth are available for review at the DFD office.

II. List of Acronyms

AFO	Albuquerque Field Office
AMLR	abandoned mine lands reclamation
AVS	Applicant Violator System
CFR	Code of Federal Regulations
DFD	Denver Field Division
DOGM	Utah Division of Oil, Gas and Mining
EY 95	evaluation year 1995
OSM	Office of Surface Mining Reclamation and Enforcement
POV	pattern of violation
SMCRA	Surface Mining Control and Reclamation Act of 1977
TDN	ten-day notice

III. Executive Summary

Regulatory program.--Evaluation year (EY) 95 was a time of significant progress for the implementation of the Utah regulatory program. The Utah Division of Oil, Gas and Mining (DOGM) and OSM resolved or partially resolved two major issues that had been under contention by the two parties for over 5 years. These two issues had undermined DOGM's

and OSM's shared commitment for protecting the environment and coal field citizens in Utah. By the end of EY 95, DOGM and OSM had cooperatively recommitted themselves to promoting the SMCRA principles of preventing offsite mine impacts and successfully achieving onsite mine reclamation.

One of the major issues concerned the permitting of mine access and haul roads. DOGM developed a program policy, which sets forth an interpretation of its law and rules that is consistent with SMCRA and the Federal regulations. Accordingly, OSM decided it was neither appropriate nor necessary in accordance with 30 CFR Part 733 to substitute direct Federal enforcement for that part of the regulatory program.

The other major issue concerned the restoration of approximate original contour as it relates to the elimination or retention of highwalls. DOGM promulgated rules that are no less stringent than SMCRA and no less effective than the Federal regulations. In the next evaluation period, DOGM and OSM will conduct minesite evaluations to determine whether these rules are being properly implemented.

Of lesser significance, Utah successfully resolved OSM's Applicant Violator System (AVS) maintenance concerns. It also approved two phase II bond releases.

With only a few exceptions, DOGM is implementing its regulatory program consistent with the provisions of SMCRA. During its EY 95 evaluation, OSM identified inadequacies concerning bond amounts and procedures, and patterns of violations reviews (POV's).

AMLR program.--Since January 21, 1981, the effective date of the Secretary of the Interior's approval of the Utah AMLR program, OSM has awarded DOGM \$23.75 million in funding for reclamation and administration of the program. The Utah AMLR program is generally well managed with no significant issues identified during EY 95. No outstanding significant issues existed from previous evaluation periods.

IV. Overview of the Utah Coal Mining Industry

Coal is found beneath approximately 18 percent of the state of Utah, but only 4 percent is considered minable at this time. The demonstrated coal reserve base is about 6.4 billion tons, which is 1.3 percent of the national reserve base. Most of Utah's coal resources are held by the Federal government and Indian tribes.

The coal fields are divided into the Northern, Central, Eastern, and Southwestern Utah Coal Regions. The most productive region is the Central Utah Coal Region which includes the Book Cliffs, Wasatch Plateau, and Emery Coal Fields. There are vast, substantially undeveloped coal fields in the Southwestern Utah Coal Regions. Development of these fields will probably be difficult because of environmental concerns resulting from the proximity of national parks and other recreation areas.

Most of the coal is bituminous and is of Cretaceous age. The BTU value is high compared to

other States. Sulfur content ranges from medium to low in the more important coal fields.

The majority of the coal production is produced by underground mining operations. Most of them mine seams exceeding 8 feet in thickness. There is one surface mine operation; it extracts coal from an underground mine refuse pile. There are 31 inspectable units, 23 of which are currently operating. There are 132,080 acres of land currently under permit for mining with approximately 2,500 acres disturbed. Coal production has been steadily increasing since the early 1970's; production was 24.57 million tons in 1995. Utah's coal industry employs approximately 2,500 miners.

The climate of the Central Utah Coal Region is characterized by hot, dry summers and cold, relatively moist winters. Normal precipitation varies from 6 inches in the lower valleys to more than 40 inches on some high plateaus. The growing season ranges from 5 months in some valleys to only 2 1/2 months in mountainous regions. These extreme climatic conditions make reclamation difficult.

Abandoned mine hazards in Utah are varied, numerous, and widespread. Coal mine hazards commonly included open vertical shafts, open portals, often accompanied by methane emission, deteriorated structures, burning coal piles, unstable mine waste piles, underground coal mine fires, subsidence, and erosion of waste material into streams. Most abandoned coal mines are found in the Central Utah Coal Region where much of the State's coal mining took place. However, abandoned coal mines can be found in the southwestern, south-central, and northeastern areas of Utah as well. Many coal problems areas in Utah already have been reclaimed. Thousands of abandoned noncoal mine hazards can be found throughout the State. Abandoned noncoal mine hazards in Utah commonly include open vertical and inclined shafts, open portals, deteriorated structures, unstable waste piles, and subsidence.

V. Success in Achieving the Purposes of SMCRA

Regulatory program.--One of the purposes of SMCRA is to assure that adequate procedures are undertaken to reclaim surface areas as contemporaneously as possible with the mining operations (section 102(e) of SMCRA). Approximately 132,080 acres have been permitted in Utah, but because of the large percentage of underground mines which create minimal surface disturbance, only 2,500 acres have been disturbed. With respect to reclamation success since original program approval, one final bond release has occurred, and additional limited reclamation has occurred on about 200 acres. Eight sites for which operations have ceased are in various stages of reclamation; three of these sites are in bond forfeiture. The amount of final reclamation is low, because most mines are still active, and for those that are not, most are in early stages of reclamation.

AMLR program.--One of the purposes of SMCRA is to promote the reclamation of mined areas left without adequate reclamation prior to enactment of SMCRA and which continue, in their unreclaimed condition, to substantially degrade the quality of the environment, prevent or damage the beneficial use of land or water resources, or endanger the health or safety of the public (section 102(h) of SMCRA). DOGM's reclamation projects abate environmental,

health, and safety hazards. The restored lands are more compatible with surrounding areas and are of a greater use to the people and wildlife of Utah.

VI. Innovative State Actions

The Director, DOGM, actively participated on the joint States and OSM team that reinvented the oversight process for State regulatory programs. The team's efforts resulted in a results-oriented oversight strategy that was incorporated into OSM directive REG-8, "Oversight of State Regulatory Programs," which was implemented beginning January 1, 1996. The new approach will result in a more meaningful oversight by focusing on on-the-ground results, and it will eliminate unnecessary paperwork, procedural details, and data collection. In acknowledging the team's significant accomplishments, the Secretary of the Interior noted that the new oversight philosophy will benefit the families who live and work in America's coalfields, be helpful in the States and OSM working together to achieve consensus, target funding based on State needs, and avoid duplication by OSM of State program implementation.

Utah began a series of public meetings with stakeholders, which are individuals who represent a variety of public and private parties that have an interest in the policies and procedures of DOGM. Stakeholders include ranchers, environmentalists, scientists, the media, lawmakers, government officials, and private citizens. At the meetings, DOGM updates the interested parties on its current and planned activities and solicits input on these activities.

VII. Status of Issues from Previous Annual Evaluation Reports

Regulatory program.--DOGM and OSM partially resolved two major issues. As the result of DOGM's developing a program policy for road regulation that is consistent with SMCRA and the Federal regulations, DOGM and OSM partially resolved a long-standing issue concerning the permitting of mine access and haul roads. As the result of DOGM's promulgation of rules that are no less stringent than SMCRA and no less effective than the Federal regulations, DOGM and OSM partially resolved another long-standing issue concerning the restoration of approximate original contour as it relates to the elimination or retention of highwalls. In future evaluation periods, DOGM and OSM will conduct minesite evaluations to determine whether the policy and rules are being properly implemented.

In past evaluation reports, OSM identified as an issue DOGM's failure to cite most violations. On the basis of violations that OSM identified on inspections that it conducted shortly after DOGM complete inspections, OSM found for EY's 93 and 94 that DOGM respectively cited 16 and 21 percent of the identified violations. Utah has not agreed with this assessment and there have over a long period of time discussions with OSM on the subject. During EY 95, OSM conducted three inspections during which it identified two uncited violations. Because of the low number of recent OSM inspections, OSM cannot definitively conclude whether this previously identified deficiency still exists or has been corrected.

During past evaluation periods, OSM found that DOGM had not properly applied the criteria

for assessment of civil penalties. OSM did not conduct an evaluation of this topic during EY 95.

AMLR program.--No outstanding significant issues remain from previous evaluation periods.

VIII. Actions Affecting Program Implementation

On February 7, 1995, OSM notified the Director, DOGM, that it had reason to believe that violations of the approved Utah regulatory program were resulting from Utah's failure to effectively enforce the part of the program for the regulations of mine access and haul roads. Therefore, OSM initiated actions under 30 CFR 733.12(b) that could result in direct OSM enforcement of these parts of the program. At Utah's request, OSM held an informal conference on March 14, 1995, to discuss OSM's notification. On July 3, 1995, DOGM clarified its policy on the permitting of public roads that may be used for, or related to, coal mining and reclamation activities. OSM agreed with this clarification and terminated the proceedings under 30 CFR Part 733.12.

IX. Summary Findings

A. Regulatory Program

Regulatory Program Element: 2. Bonding

Subelements Reviewed: Maintenance of tracking and security systems for bonds; verification of the validity, value, and lack of restrictions placed on bonds; and bond adjustments and replacements.

Type of Review: Routine in-depth review.

Summary Findings: OSM reviewed DOGM's administration of its coal mining bonds, including actions associated with permit transfers, adjustments, and bond replacements were evaluated. In addition, a follow-up review of one permit was conducted to determine if previous deficiencies had been resolved.

With respect to the security systems for bonds, OSM determined that DOGM maintains a good security system for its bonding instruments by locking them in a fire-proof cabinet with limited staff access.

With respect to the tracking of bonding actions and instruments, DOGM maintains both a computerized system, the "Coal Bonds" report, and a physical bond file system. The computer report provides current information about permitting actions that resulted in changes to bonds.

Following evaluation of how each bonding action is tracked, OSM discussed with Utah the need for a records management system for bonding transactions.

OSM reviewed one permit covered by a self-bond. OSM determined during the review that financial data in DOGM's records are not current enough to determine whether the permittee still qualifies for self-bonding. During previous evaluation year reviews, DOGM indicated that its policy was to require annual audited financial statements from the permittee. However, the most recently completed 2 fiscal years of financial data have not been submitted to the State for review. This is a concern because the Financial Accounting Standards Board (FASB) has issued new accounting rules during recent years (FASB 106 and FASB 109) that companies must implement when preparing their financial statements. The implementation of these new rules has caused some self-bonded entities in other jurisdictions to no longer qualify for self-bonding.

Utah has indicated that it is preparing a schedule to resolve bonding deficiencies noted in the previous evaluation report pertaining to the Convulsion Canyon operation. } →

Regulatory Program Element: 3. Inspections

Subelements Reviewed: Inspection frequency and procedures.

Type of Review: Routine in-depth review

Summary Findings: DOGM conducted 259 partial and 126 complete inspections on 31 inspectable units. DOGM met the required complete inspection frequency for all mines except 4 active mines and 1 inactive mine. The overall percentage of required inspections conducted by DOGM (both complete and partial inspections) was 96 percent.

Regulatory Program Element: 4. Enforcement

Subelement Reviewed: POV reviews.

Type of Review: Routine in-depth review.

Summary of Findings: At the time of the review of this topic, OSM was concerned that DOGM was infrequently running POV checks on the State computerized violation database. OSM has assured OSM that it is now conducting monthly POV reviews. OSM identified some data entry problems; these included inconsistent and inaccurate coding of violations, and not entering all enforcement actions. OSM believes that DOGM's June 2, 1993, POV policy directive, "Procedure for Determination of Patterns of Violations, Utah Code Annotated Section 40-10," is not consistent with the OSM-approved State statute at Utah Code Annotated 40-10-22(1)(d) and the implementing rule at R645-400-331.

Regulatory Program Element: 11. Program Administration

Subelement Reviewed: Grants management.

Type of Review: Routine in-depth review.

Summary Findings: OSM reviewed all grants transaction documents submitted by DOGM. DOGM continues to administer and manage Federal grants in accordance with Department of the Interior, Department of Treasury, and Office of Management and Budget requirements. DOGM submitted the regulatory grant application prior to the due date, which was helpful in OSM providing in a timely manner needed funds for continuous program support. Also, DOGM submitted financial, progress, and closeout reports to OSM in a timely manner. On the average, DOGM submitted financial reports 10 days prior to the due dates. OSM did not identify any significant grants management concerns through its contact with DOGM.

B. AMLR Program

AMLR Program Element: 1. Project Planning

Subelements Reviewed: Inventory maintenance, project selection, rights of entry, and lien eligibility determinations.

Type of Review: Routine in-depth review.

Summary Findings: DOGM maintained a complete, current, prioritized inventory of sites eligible for, and in need of, reclamation.

DOGM adhered to the project ranking and selection process approved in its AMLR plan. It provided for adequate public participation in the project selection process in accordance with its approved plan.

DOGM acquired in a timely manner rights of entry necessary for project design, engineering, and reclamation.

DOGM did not assess any liens during the time period July 1, 1994, through June 30, 1995. Generally, DOGM determined whether any real estate parcels within project areas may be subject to liens after reclamation was completed. Liens qualifying for waivers were waived after the respective projects were completed.

AMLR Program Element: 2. Project Construction

Subelements Reviewed: Lien recording and maintenance; project maintenance.

Type of Review: Routine in-depth review.

Summary Findings: DOGM did not assess any liens in EY 95 through June 30, 1995. No professional appraisals were required in this period. DOGM's maintenance and disposition of a lien assessed in 1985 was in accordance with its approved program.

DOGM monitored completed projects and determined that maintenance needs require additional work at three projects. Maintenance of one noncoal project continued in this period to repair vandalized mine closures and to address openings created by subsidence. DOGM requested funding for additional work on an underground coal fire project in the 1995 simplified grant. Work to repair an eroded drainage ditch at a third project will be scheduled when initial reclamation of another project in the vicinity is contracted.

AMLR Program Element: 3. Program Administration

Subelements Reviewed: Grants management - maintenance of internal controls and, procurement and management of property and services; coordination with other agencies.

Type of Review: Routine in-depth review.

Summary Findings: OSM reviewed all documents it received about grant transactions. The State continues to administer and manage Federal grants in accordance with Department of the Interior, Department of Treasury, and Office of Management and Budget requirements. DOGM submitted the AMLR grant application well before it was due. Financial, progress and closeout reports are timely. On the average, DOGM submits financial reports 10 days prior to the due dates. Contacts with DOGM revealed no significant concerns in grants management.

DOGM's communication and coordination with other agencies enabled it to effectively administer its AMLR program. No projects have been reclaimed in Utah to date under the Natural Resource Conservation Service's Rural Abandoned Mine Program.

AMLR Program Element: Overall Reclamation Success

Subelements Reviewed: There are no subelements.

Type of Review: Routine in-depth review.

Summary Findings: OSM found that DOGM's reclamation projects abated identified health, safety, and environmental hazards, and they also protected property. Reclamation, which has been completed to date increased the probability that restored lands will be more compatible with surrounding areas and will return to a condition that will be of greater use to the people and wildlife of Utah than if left unreclaimed. Reclamation completed to date is consistent with Utah's approved plan and grant applications. Reclamation completed by DOGM is successful overall.

APPENDIX A

Tabular Summaries of Data Pertaining to Mining, Reclamation, and Program Administration

The following tables present data pertinent to mining operations, State and Federal regulatory activities, and the reclamation of abandoned mines within Utah. They also summarize funding provided by OSM and Utah staffing. The reporting period for the data contained in all tables is the 1995 calendar year. Additional data used by OSM in its evaluation of Utah's performance is available for review in the evaluation files maintained by DFD.

TABLE 1

COAL PRODUCTION (Millions of Short Tons)			
Calendar year	Surface mines	Underground mines	Total
Coal production for entire State			
1993	.0	21.33	21
1994	.03	21.03	21
1995	.07	24.57	25
Coal production where OSM is the regulatory authority			
1993	0	0	0
1994	0	0	0
1995	0	0	0

TABLE 2

INSPECTABLE UNITS (As of December 31, 1995)												
Coal mines and related facilities	Number and status of units								AcreageA (hundreds of acres)			
	Active		Inactive		Abandoned		Totals					
			Temporary cessation	Phase II bond release								
	IP	PP	PP	IP	PP	IP	PP	IP	PP	IP	PP	Total
STATE and PRIVATE LANDS												
REGULATORY AUTHORITY: UTAH												
Surface mines	0	1	0	0	0	0	0	0	1	0	3	3
Underground mines		1	3	0	3	1	2	1	9	14	1	1
Other facilities	0	3	0	0	0	0	0	0	3	0	6	6
Subtotals	0	5	3	0	3	1	2	1	13	0	10	10
FEDERAL LANDS												
REGULATORY AUTHORITY: UTAH												
Surface mines	-	-	-	-	-	-	-	0	0	0	0	0
Underground mines	-	-	-	-	-	-	-	0	0	0	19	19
Other facilities	-	-	-	-	-	-	-	0	0	0	2	2
Subtotals	0	0	0	0	0	0	0	0	0	0	21	21
INDIAN LANDS												
REGULATORY AUTHORITY: OSM												
Surface mines	-	-	-	-	-	-	-	0	0	-	-	0
Underground mines	-	-	-	-	-	-	-	0	0	-	-	0
Other facilities	-	-	-	-	-	-	-	0	0	-	-	0
Subtotals	0	0	0	0	0	0	0	0	0	0	0	0
ALL LANDS B												
Surface mines	0	1	0	0	0	0	0	0	1	0	3	3
Underground mines	0	1	3	0	3	1	2	1	9	0	20	20
Other facilities	0	3	0	0	0	0	0	0	3	0	8	8
Totals	0	5	3	0	3	1	2	1	13	0	31	31
Average number of permits per inspectable unit (excluding exploration sites) _____												
Average number of acres per inspectable unit (excluding exploration sites) _____												
Number of exploration permits on State and private lands: _____ On Federal lands: _____C												
Number of exploration notices on State and private lands: _____ On Federal lands: _____C												
IP: Initial regulatory program sites.												
PP: Permanent regulatory program sites.												

A When a unit is located on more than one type of land, includes only the acreage located on the indicated type of land.

B Numbers of units may not equal the sum of the three preceding categories because a single inspectable unit may include lands in more than one of the preceding categories.

C Includes only exploration activities regulated by the State pursuant to a cooperative agreement with OSM or by OSM pursuant to a Federal lands program. Excludes exploration regulated by the Bureau of Land Management.

TABLE 3

STATE INSPECTION ACTIVITY
January 1 -- December 31, 1995

Type of inspectable unit	Number of inspections conducted		Percent of required inspections conducted ^A		Inspectable units for which State met required inspection frequency			
	Complete inspections	Partial inspections	Complete inspections	Partial inspections	Complete inspections		All inspections	
COAL MINES AND FACILITIES					Number	%	Number	%
Active	98	208	92	96	18	78	17	
Inactive	23	39	96		5	83	5	
Abandoned	5	12	42	50	0	0	0	
Totals	126	259	96	96	23	74	22	7
Exploration permits ^B	0	13						
Exploration notices ^B	0	11						

^A Calculated on a site-specific basis. Excess complete inspections are considered partial inspections. For each site any inspections in excess of the total number required by the approved program are not included.

^B Includes all valid or unreclaimed notices and permits. No inspection frequency data are provided since SMCRA does not establish a minimum numerical inspection frequency for coal exploration activities.

TABLE 4

TRENDS IN INSPECTABLE UNITS AND STATE INSPECTIONS				
Evaluation Year		1993	1994	1995
Inspectable units for which State has jurisdiction				
Surface mines:	Active	1	1	1
	Inactive	0	0	0
	Abandoned	0	0	0
Subtotals for surface mines		1	1	1
Underground mines:	Active	20	20	18
	Inactive	4	4	6
	Abandoned	3	3	3
Subtotals for underground mines		27	27	27
Other facilities:	Active	4	4	4
	Inactive	0	0	0
	Abandoned	0	0	0
Subtotals for other facilities		4	4	4
All mine types:	Active	25	25	23
	Inactive	4	4	6
	Abandoned	3	3	3
Totals		32	32	32
Exploration permits		1	1	2
Exploration notices		6	6	11
State inspections conducted (Exclusive of exploration sites)				
Complete		130	133	121
Partial		240	252	247
Totals		370	385	368
Percent of required State inspections conducted				
Complete inspections		98	96	96
Partial inspections		99	99	96
Citizen complaints received		0	0	2

TABLE 5

STATE AND OSM ENFORCEMENT ACTIVITY						
January 1 -- December 31, 1995						
Type of enforcement action taken	Actions taken by State		Actions taken by OSM on:			
			Sites where State is the primary regulatory authority		Sites where State is NOT the primary regulatory authority	
	Number of actions	Number of violations	Number of actions	Number of violations	Number of actions	Number of violations
Notice of violation issued	23	21	0	0	0	0
Imminent harm cessation order issued	3	3	0	0	0	0
Failure-to-abate cessation order	2	1	0	0	0	0
Show cause order issued for pattern of violations	0				0	
Permit suspendedA	0				0	
Permit revoked	0				0	
Individual civil penalty assessed	0	NA	0	0	0	0
Criminal penalty requested	0	NA	0	0	0	0
Criminal penalty assessed	0	NA	0	0	0	0
Injunction requested	0	NA	0	0	0	0
Injunction obtained	0	NA	0	0	0	0
Settlement agreement approved in lieu of further enforcement action	1	1	1	1	0	0

A Average duration of permit suspension:

N/A

(State)

N/A

(OSM)

TABLE 6

OSM INSPECTIONS OF SITES WHERE THE STATE IS THE PRIMARY REGULATORY AUTHORITY							
January 1 -- December 31, 1995							
Type of unit inspected	Number of inspections by type of inspection						
	Complete oversight	State bond release	Other oversight	Ten-day notice followup A	Enforcement action followup	Other	Totals
Type of mine or facilityB							
Surface mines	0	0	0	0	0	0	0
Underground mines	4	0	0	2	1	0	7
Preparation plants	1	0	0	0	0	0	1
Other facilities	0	0	0	0	0	0	0
Totals	5	0	0	2	1	0	8
Mine activity statusB							
Active	4	0	0	2	1	0	7
Inactive	1	0	0	0	0	0	1
Abandoned			0	0	0	0	0
Total bond release		0	0	0	0	0	0
Reclaimed forfeiture			0	0	0	0	0
Permit not started			0	0	0	0	0
Unpermitted			0	0	0	0	0
Type of permitB							
Initial program	0	0	0	0	1	0	1
Permanent program	5	0	0	2	1	0	8
Unpermitted			0	0	0	0	0
Coal exploration sites							
Exploration permits			0	0	0	0	0
Exploration notices			0	0	0	0	0

A When State response is inappropriate and Federal inspection is necessary.

B Does not include coal exploration sites.

TABLE 7

OSM INSPECTIONS OF SITES WHERE THE STATE IS NOT THE PRIMARY REGULATORY AUTHORITY January 1 -- December 31, 1995								
Type of unit inspected	Type of program under which inspections were conducted							
	Federal landsA		Indian lands		Other		Totals	
	Complete insp.	Partial insp.	Complete insp.	Partial insp.	Complete insp.	Partial insp.	Complete insp.	Partial insp.
Type of mine or facilityB								
Surface mines	0	0	0	0	0	0	0	0
Underground mines	0	0	0	0	0	0	0	0
Preparation plants	0	0	0	0	0	0	0	0
Other facilities	0	0	0	0	0	0	0	0
Totals	0	0	0	0	0	0	0	0
Mine activity status								
Active	0	0	0	0	0	0	0	0
Inactive	0	0	0	0	0	0	0	0
Abandoned	0	0	0	0	0	0	0	0
Total bond release	0	0	0	0	0	0	0	0
Reclaimed forfeiture	0	0	0	0	0	0	0	0
Permit not started	0	0	0	0	0	0	0	0
Unpermitted	0	0	0	0	0	0	0	0
Type of permit								
Initial program	0	0	0	0	0	0	0	0
Permanent program	0	0	0	0	0	0	0	0
Unpermitted	0	0	0	0	0	0	0	0
Coal exploration sites								
Exploration permits	0	0	0	0	0	0	0	0
Exploration notices	0	0	0	0	0	0	0	0

A In those States that have not entered into a State - OSM cooperative agreement providing for State regulation of mining and exploration on Federal lands.

B Does not include coal exploration sites.

TABLE 8

COMPLIANCE FINDINGS -- OSM INSPECTIONS						
January 1 -- December 31, 1995						
Performance standard	Complete oversight inspections			Other OSM inspections		
	Number of times standard was evaluated	Times site was in compliance with standard		Number of times standard was evaluated	Times site was in compliance with standard	
		Number	Percent		Number	Percent
. Administrative						
1. Mining within valid permit area	5	5	100	0	N/A	N/A
2. Mining within bonded area	5	5	100	0	N/A	N/A
3. Terms and conditions of permit	5	5	100	0	N/A	N/A
4. Liability insurance	5	5	100	0	N/A	N/A
5. Ownership and control	5	5	100	0	N/A	N/A
6. Temporary cessation	2	2	100	0	N/A	N/A
. Hydrologic balance						
1. Drainage control	5	4	80	0	N/A	N/A
2. Inspections and certifications	5	5	100	0	N/A	N/A
3. Siltation structures	5	5	100	0	N/A	N/A
4. Discharge structures	5	4	100	0	N/A	N/A
5. Diversions	5	5	80	0	N/A	N/A
6. Effluent limits	5	5	100	0	N/A	N/A
7. Ground water monitoring	5	5	100	0	N/A	N/A
8. Surface water monitoring	5	5	100	0	N/A	N/A
9. Drainage--acid\toxic materials	3	3	100	0	N/A	N/A
10. Impoundments	5	5	100	0	N/A	N/A
11. Stream buffer zones	4	4	100	0	N/A	N/A
. Topsoil and subsoil						
1. Removal	4	4	100	0	N/A	N/A
2. Substitute materials	4	4	100	0	N/A	N/A
3. Storage and protection	5	5	100	0	N/A	N/A
4. Redistribution	2	2	100	0	N/A	N/A
. Backfilling and grading						
1. Exposed openings	2	2	100	0	N/A	N/A
2. Contemporaneous reclamation	3	3	100	0	N/A	N/A
3. Approximate original contour	1	1	100	0	N/A	N/A
4. Highwall elimination	1	1	100	0	N/A	N/A
5. Steep slopes (includes downslope)	1	1	100	0	N/A	N/A
6. Handling of acid\toxic materials	2	2	100	0	N/A	N/A
7. Stabilization (slides, rills, gullies)	3	3	100	1	1	100

(Table 8 continued on next page)

TABLE 8 (CONTINUATION)

COMPLIANCE FINDINGS -- OSM INSPECTIONS

January 1 -- December 31, 1995

Performance standard	Complete oversight inspections			Other OSM inspections		
	Number of times standard was evaluated	Times site was in compliance with standard		Number of times standard was evaluated	Times site was in compliance with standard	
		Number	Percent		Number	Percent
. Excess spoil disposal						
1. Placement	0	N/A	N/A	0	N/A	N/A
2. Drainage control	0	N/A	N/A	0	N/A	N/A
3. Surface stabilization	0	N/A	N/A	0	N/A	N/A
4. Inspections and certifications	0	N/A	N/A	0	N/A	N/A
. Coal mine waste disposal						
1. Drainage control	3	2	67	0	N/A	N/A
2. Surface stabilization	3	3	100	0	N/A	N/A
3. Placement	3	3	100	0	N/A	N/A
4. Inspections and certifications	3	3	100	0	N/A	N/A
5. Impounding structures	1	1	100	0	N/A	N/A
. Use of explosives						
1. Blaster certification	1	1	100	0	N/A	N/A
2. Distance prohibitions	1	1	100	0	N/A	N/A
3. Blast survey/schedule	1	1	100	0	N/A	N/A
4. Warnings and records	1	1	100	0	N/A	N/A
5. Control of adverse effects	1	1	100	0	N/A	N/A
. Subsidence control plan	4	4	100	0	N/A	N/A
Roads						
.Road construction	5	5	100	0	N/A	N/A
2. Certification	5	5	100	0	N/A	N/A
3. Drainage	5	5	100	0	N/A	N/A
4. Surfacing and maintenance	5	5	100	0	N/A	N/A
5. Reclamation	5	5	100	0	N/A	N/A
. Signs and markers						
1. Signs	5	5	100	0	N/A	N/A
2. Markers	5	5	100	0	N/A	N/A
. Distance prohibitions	5	5	100	0	N/A	N/A
. Revegetation						
1. Vegetative cover	5	5	100	2	0	N/A
2. Timing	5	5	100	0	N/A	N/A
. Postmining land use	2	2	100	0	N/A	N/A
. Other	0	N/A	N/A	0	N/A	N/A
Totals (both pages)	181	178	98	2	N/A	N/A

Does not include violations in ten-day notices which either are on appeal to the Deputy Director or have not been affirmed on appeal.

TABLE 9

CITIZEN COMPLAINTS		
Number of complaints	State	OSM
Action pending as of January 1, 1995	0	0
Complaints received in 1995	2	0
Complaints referred to State in 1995	0	0
Complaints investigated in 1995	2	0
Responses provided to complainant in 1995	2	0
Action pending as of December 31, 1995	0	0

TABLE 10

PERMIT APPLICATIONS RECEIVED BY STATE January 1 -- December 31, 1995				
Type of application	Surface mines	Underground mines	Other facilities	Totals
New permits	0	2	0	2
Renewals	0	6	0	6
Transfers, sales and assignments of permit rights	0	5	0	5
Small operator assistance	0	0	0	0
Exploration permits	0	11	0	11
Totals	0	24	0	24

TABLE 11

STATE PERMITTING ACTIONS
(Applications Approved and Authorizations to Operate Issued)
January 1 -- December 31, 1995

Type of application	Surface mines		Underground mines		Other facilities		Totals	
	No.	Acres	No.	Acres A	No.	Acres	No.	Acres
New permits	0	0	0	0	0	0	0	0
Renewals	0	0	5	10,424	0	0	5	10,424
Revisions (exclusive of incidental boundary revisions)	0		3		0		3	
Incidental boundary revisions	0	0	0	0	0	0	0	0
Transfers, sales and assignments of permit rights	0		3		0		3	
Small operator assistance	0		0		0		0	
Exploration permits	0		0		0		0	
Exploration noticesB	0		2		0		2	
Totals	0	0	13	10,424	0	0	13	10,424

Number of permits identified by OSM as being improvidently issuedC. _____

0

Number of improvidently issued permits for which the State took appropriate corrective action. _____

0

A Includes only the number of acres of proposed surface disturbance.

B State approval not required. Involves removal of less than 250 tons of coal and does not affect lands designated unsuitable for mining.

C Permits meeting the criteria of 30 CFR 773.20(b) and requiring rescission or other action by the State.

TABLE 12

BONDS RELEASED BY STATE (Permanent Program Permits) January 1 -- December 31, 1995		
Reclamation phase	Number of release applications approved	Acres released
I	0	0
II	2	N/A
III	0	0

TABLE 13

STATE BOND FORFEITURE ACTIVITY (Permanent Program Permits)			
	Sites	Dollars	Acres
Bonds forfeited as of January 1, 1995A	0	0	0
Bonds forfeited during 1995	0	0	0
Forfeited bonds collected as January 1, 1995A	0	0	0
Forfeited bonds collected during 1995	0	0	0
Forfeiture sites reclaimed during 1995	1	* B	*
Forfeiture sites repermited during 1995	0		0
Forfeiture sites unreclaimed as of December 31, 1995	1		0
Excess reclamation costs recovered from permittee	*	*	*
Excess forfeiture proceeds returned to permittee	*	*	*
AIncludes data only for those forfeiture sites not fully reclaimed as of this date.			
BCost of reclamation, excluding general administrative expenses.			

TABLE 14

STATUS OF STATE'S BOND POOL OR FORFEITURE RECLAMATION FUND (For States with Alternative Bonding Systems)		
	January 1, 1995	December 31, 1995
Number of participating permits	N/A	N/A
Acreage of participating permits	N/A	N/A
Fund balance	\$	\$
Fund income		\$
Expenditures		\$
Funds restricted to use on a specific site (to be returned if permittee reclaims site)	\$	\$
Reclamation liabilities^A		
Number of sites	N/A	N/A
Acres	N/A	N/A
Estimated cost of reclamation	\$	\$
Portion of estimated reclamation cost covered by site-restricted bonds	\$	\$
A Includes cost of reclaiming all sites for which the State has issued final bond forfeiture orders.		

TABLE 15

LANDS UNSUITABLE PETITIONS	
Petitions seeking to designate lands as unsuitable for mining	
Decisions pending as of January 1, 1995	0
Petitions received during 1995	0
Petitions approved during 1995	0
Petitions rejected during 1995	0
Petitions approved in part/rejected in part during 1995	0
Decisions pending as of December 31, 1995	0
Petitions seeking to terminate previous lands unsuitable designations	
Decisions pending as of January 1, 1995	0
Petitions received during 1995	0
Petitions approved during 1995	0
Petitions rejected during 1995	0
Petitions approved in part/rejected in part during 1995	0
Decisions pending as of December 31, 1995	0

TABLE 16

UTAH STAFFING (Fulltime Equivalents at End of Evaluation Year)			
Function	EY 1993	EY 1994	EY 1995
Abandoned mine land reclamation program (total)	7	9	8
Regulatory program			
Permit review A	13	13	13
Inspection A	4	4	4
Other (general administration, fiscal, personnel, etc.)	7	7	7
Totals for regulatory program	24	24	24
Interagency personnel assignments	31	33	32
Totals	31	33	32
A Does not include supervisory or clerical personnel.			

TABLE 17

**FUNDS GRANTED TO UTAH BY OSM
BY EVALUATION YEAR
(Millions of Dollars)**

Type of grant	Federal funds requested by [State/Tribe]			Federal funds awarded			Federal funds deobligated			Federal funding as a percentage of total program costs		
	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>
Administration and enforcement	1.55	1.63	1.59	1.26	1.30	1.31	0.00	0.00	0.00	86%	86%	86%
Abandoned mine land reclamationA	2.79	2.09	1.71	2.79	2.04	1.70	0.00	0.00	0.00	100%	100%	100%
Small operator assistance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0%	0%
Totals	4.34	3.72	3.30	4.05	3.34	3.01	0.00	0.00	0.00	95%B	94%B	93%B

A Includes administrative grants, construction grants, and cooperative agreements.

B Percentage calculated on weighted basis.

TABLE 18

STATUS OF AMLR FUNDS AWARDED TO UTAH (Millions of Dollars)						
Year of award	Funds approved by OSM	Cumulative obligations by State/Tribe	Cumulative outlays by State/Tribe	Funds deobligated by State/Tribe (cumulative)	Funds remaining available for obligation (cumulative)	Percent of grant period lapsed
Administrative costs (including State emergency program administrative costs)						
EY 81-94	6.67		5.78	0.76	0.13	97%
EY 95	0.40		0.00	0.00	0.40	35%
Subtotals	7.07		5.78	0.76	0.53	
Project costs (exclusive of State emergency project costs)						
EY 81-94	14.95	13.02	11.48	1.60	1.87	92%
EY 95	1.30	0.60	0.00	0.00	1.30	17%
Subtotals	16.25	13.62	11.48	1.60	3.17	
State emergency project costs						
EY 81-94	0.00		0.00	0.00	0.00	0%
EY 95	0.00		0.00	0.00	0.00	0%
Subtotals	0.00		0.00	0.00	0.00	
Set-aside program costs						
EY 81-94	0.43		0.43	0.00	0.00	0%
EY 95	0.00		0.00	0.00	0.00	0%
Subtotals	0.00		0.00	0.00	0.00	
Subsidence insurance program costs						
EY 81-94	0.00		0.00	0.00	0.00	0%
EY 95	0.00		0.00	0.00	0.00	0%
Subtotals	0.00		0.00	0.00	0.00	
Cooperative agreement costs						
All EY	0.00	0.00	0.00	0.00	0.00	0%
Totals	23.75	13.62	17.69	2.36	3.70	

TABLE 19

ABANDONED MINE LAND RECLAMATION NEEDS AND ACCOMPLISHMENTS SINCE PROGRAM APPROVAL							
Problem nature	Unit	Coal-related problems				Noncoal-related problems	
		Abatement status			Total	Abatement status	
		Unfunded	Funded	Completed		Funded	Completed
Priority 1 & 2 (Protection of public health, safety, and general welfare)							
Clogged streams	Miles	0.2	0	10.6	10.8	0	0
Clogged stream lands	Acres	7.5	0	0	7.5	0	0
Dangerous highwalls	Lin. Feet	0	0	2,925	2,925	0	0
Dangerous impoundments	Count	1	0	1	2	0	0
Dangerous piles & embankments	Acres	1.7	0	100	101.7	0	0
Dangerous slides	Acres	0	0	0	0.0	0	0
Gases: hazardous/explosive	Count	8	0	19	27	0	0
Underground mine fires	Acres	0	0	2	2	0	0
Hazardous equip. & facilities	Count	15	0	135	150	0	0
Hazardous water bodies	Count	0	0	0	0.0	0	0
Industrial/residential waste	Acres	1	0	2	3	0	0
Portals	Count	66	8	493	567	0	490
Polluted water: agric. & indust.	Count	1	0	2	3	0	0
Polluted water: human consumption	Count	0	0	0	0.0	0	0
Subsidence	Acres	0	0	2	2	0	6
Surface burning	Acres	13	0	37.8	50.8	0	0
Vertical opening	Count	3	0	24	27	0	300
Priority 3 (Environmental restoration)							
Spoil areas	Acres	6	0	0	6	0	0
Benches	Acres	1	0	0	1	0	0
Pits	Acres	1	0	0	1	0	0
Gob piles	Acres	0	0	0	0.0	0	0
Slurry ponds	Acres	0	0	0	0.0	0	0
Haul roads	Acres	0	0	0	0.0	0	0
Mine openings	Count	0	0	0	0.0	0	0
Slumps	Acres	0	0	0	0.0	0	0
Highwalls	Lin. Feet	0	0	0	0.0	0	0
Equipment/facilities	Count	0	0	0	0.0	0	0
Industrial/residential waste	Acres	0	0	0	0.0	0	0
Water problems	Gal./mi n.	0	0	0	0.0	0	0
Other	0	0	0	0	0.0	0	0

Note: All data in this table are taken from the Abandoned Mine Land Inventory System (AMLIS). Since information concerning noncoal-related problems and accomplishments did not have to be included in AMLIS until November 26, 1991, the table may not reflect all noncoal-related accomplishments.

ADMINISTRATIVE FINDINGS

Stratigraphy

The applicant presents a geologic description of the mine plan area in Chapter 6. A generalized stratigraphic column in Table 6-1 illustrates the stratigraphic sequence. The site is characterized by Cretaceous and Tertiary formations deposited along the western edge of a ocean basin. The lithology and structure are described and illustrated in Figures 6-2 and 6-3. A short summary of each stratigraphic unit depicts the thickness, origin and character of each formation or member functioning as an aquifer or coal bed.

The alternating sequences of shales and sandstones in the Mancos Shale and heterogeneous of terrestrial, fluvial, paludal and marine characteristics of the coal bearing Blackhawk Formation reveals a depositional environment in a fluctuating regressive seaway.

The Blackhawk Formation is the only formation in the area that contains coal bearing units. Eight coal beds have been identified in the vicinity of the mineplan area, four of which outcrop in the North Fork of Gordon Creek Canyon, Coal Canyon and Bryner Canyon. The Hiawatha and Castlegate 'A' coal seams are the only beds in the area thick enough to mine.

Structure

The minesite is surrounding by two major fault systems the Gordon Creek fault zone trending north- south and the Fish Creek fault zone trending approximately north 60 degrees west. Two major faults of the Fish Creek fault zone create a graben and enclose the lease block.

This area has a history of mining. The Horizon mine will initially mine coal between the old National Mine ;and Beaver Creek Coal Company #3 Mine on the east and the Blue Blaze No. 2 and 3 Mines on the west. The National and Beaver Creek Coal Company #3 mine

ADMINISTRATIVE FINDINGS

Last revised - August 30, 1996

were developed within the grauben area of the Fish Creek Grauben. Plate 3-5 identifies some of the older workings, however several old mines adjacent to the proposed workings have not been depicted. The applicant should identify all old workings in the vicinity of the proposed mining operation and indicate in which seam they were developed.

Personal communication with Dan Guy identified that Gordon Creek Coal Company intercepted a flow of approximately 600 gallons per minute from a fault in the Fish Creek Grauben system. Fault systems can act as conduits for groundwater which can supply springs with flow or act as dams to store water when to facies of different permeabilities align as a result of the offset. The extent of faulting shown on the Geology Map, Plate 6-1 identifies an extensive fault system with some fault extending several miles through other drainages. Future mining adjacent and through these faults as identified in the BLM application boundary on Plate 3-5 will require an analysis of the storage and transmissivity of faults.

Cross-Sections

The applicant submitted geologic cross-sections, Plates 6-2 and 6-3 to project the horizontal extent of the lithologic layers and relationships between fault zones and coal zones. Plate 6-2 illustrates the trends in from north to south from 7 drill sites, and Plate 6-3 shows a west-east diagram of 13 drill sites. ARCO's measured section 1980 and LCM-4 of Plate 6-3 reveal the local lithology. The lithologic data from drill logs HZ 95-1, HZ95-2 and HZ-95-3 should be incorporated to the cross-section information. Better yet, a fence diagrams should be constructed to reveal the association of faults to lithofacies.

Subsidence Monitoring Information

The applicant has submitted a subsidence monitoring plan identifying subsidence monitoring stations and stream buffer zones on Plate 3-3. The subsidence monitoring stations are established along Beaver and Jump Creeks, the area of maximum subsidence will likely be in the center of mining. Additional survey markers should be stationed between Beaver and Jump Creeks to detect subsidence impacts. The applicant has not submitted an overburden isopach map for either the Hiawatha or Castlegate "A" coal seams. The applicant needs to address the method used to establish the stream buffer zone for Beaver Creek.

Acid and Toxic Forming Materials

Acid and toxic forming materials were addressed by the operator in Section 6.5.7.1. of the MRP. From the data and information presented, there is minimal chance that acid and toxic conditions minerals will be present in sufficient quantities to cause deleterious impacts to water or soil. The applicant also proposes to sample and test for acid and toxic material on 2000 foot intervals throughout the mine.

ADMINISTRATIVE FINDINGS

Summary of Deficiencies

There is only one geological related deficiency for the one year mine permit that has to be addressed before the permit can be issued.

- 1) The applicant shall submit overburden isopach maps for the Hiawatha and Castlegate "A" seams.

Prior to mining the proposed federal lease the applicant will need to address the following deficiencies.

- 1) The applicant shall submit overburden isopach maps for the Hiawatha and Castlegate "A" seams.
- 2) The applicant should incorporate the Horizon drill holes into the cross-section matrix, preferably in the form of a fence diagram.
- 3) The applicant shall present the method by which the stream buffer zone was established.
- 4) Additional survey markers should be stationed between Beaver and Jump Creeks to detect subsidence impacts.
- 5) The applicant shall analysis the storage and transmissivity potential of faults that will likely be encountered during mining.
- 6) The applicant should identify all old workings in the vicinity of the proposed mining operation and indicate in which seam they were developed.